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THE OTHERS

To those of us working in London, a week's holiday means only one thing: to get out into the country. We have obeyed this instinctive summons, and return, healthier in countenance, determined to say something about it. The first thought that strikes us is the contrast between town and country. At first it seems blatantly obvious that ugliness is all too often manifested in towns, such as poverty and unhealthy living conditions, smoke, noise, horrid messy buildings with no pretence of planning or of architectural beauty; but this is only our preliminary impression, we emphasise. Then in the country, we find peace and cleanliness, fresh air, beauty, but above all, quietness: here the first feelings last, and are constant, however long we stay. Walking and climbing amongst fells soon bring a peace of mind and sense of proportion which are so easily lost in the city. These early hurried thoughts of our comparison give the appearance of great differences which are soon dispelled. First of all, for all their ugliness, there is much beauty within towns. Old buildings, churches, good music, paintings, and libraries are the possessions of the citydweller, to quote only a few instances. Secondly, we do find poverty, dirt, and disease in villages and hamlets, far from the city which

" . . . now doth like a garment wear
The beauty of the morning; . . ."

Acute agricultural problems furrow the brow of the countryman as deeply as the highest finance of the businessman. The " local inhabitant " is much the same as the townsman in his indifference to his surroundings. He is unaffected by the beauty and quiet of his environment, and is often at least as unhappy as the other. This is surely because he has no time for this beauty and quiet we all seek, no time for long walks, or birdwatching, botany, and the like. He has the same fight for bread, means of living for his family, and all the other emoluments of modern civilisation. He cannot afford leisure, and so has none. More often than not, he, like the factory worker, and the business clerk, has no real interest in his work, other than as the sole means of support for him and his family—a far too important problem in itself, for him to think of anything further. He cannot possibly be blamed for this. He sends his sons to the town, to good schools (if he can), that they may make a better start in life, procure better paid jobs, and so possess more comfort than he could ever hope to have. So the sons flock to the towns on their motorbikes, and the circle is about. They migrate back to the country for much needed rest and quiet, whenever they can get opportunity to do so. Neither city nor country dweller look on their work as anything except a miserable means of support; there isn't *time* for interest. Life is too much of a hard fight. So is it with the vast majority of the population.

We ourselves are in a very different situation. The medical profession is essentially one in which every man should make his job his life interest. He usually does: there is little room or occasion for men who have no interest in medicine, they ought to be discouraged from becoming doctors, from the start. Likewise there is a small unfortunate minority of those who become medical men for what they can get out of it, but there is little happiness or peace for the selfiish doctor. Turning from professional men, we meet a different state of affairs, as we have tried to show. The capitalist

system, an excellent one in many ways, probably the best (we are not politically inclined, and will not argue the point), has not been sufficiently practised by men who have solely the interest of the people at large, as their guiding principle, rather than a quest for power and money. It is a system which entirely depends on unselfish aims, if it is to progress successfully.

Some, like ourselves, can afford to cleanse mind and body in the country, with the education and leisure to appreciate it fully. Such experience must determine each of us to work to give similar happiness to the enormous majority who have been less fortunate, because of the mistakes, shortsightedness, and wrongs of previous governments. How easy it is to blame the past! But this majority are indeed powerless to live happily, because of their bitter struggle for existence—this is no sentimental statement, but a hard fact which we would be foolish to ignore. They must be given more leisure, better education, and, above all, better health. We will only achieve this, if their lives are our interest, and we continually strive for a better understanding of themselves and their problems.

DISTURBANCES OF SALT EQUILIBRIUM AFTER OPERATION

By George Discombe

It is well-known that the efficiency of the kidneys depends first, on their structural integrity; second, on the maintenance of an adequate flow of blood through the organ; and third, on the maintenance of a supra-liminal blood pressure. In spite of the repeated quotation of Claude Bernard's dictum, "La fixité du milieu intérieur est la condition de la vie libre," it is not so generally recognised that the maintenance of a normal cellular environment is of equal importance.

Whenever the composition of tissue fluid varies beyond certain limits, the limits of the normal, the function of the cells bathed by that fluid is impaired. Further, within the limits of the normal there is a range, the optimal range, sometimes narrow, within which cells are able to function with maximal efficiency. With our present coarse techniques, this optimal range can but rarely be demonstrated; but that it does exist, at least in some cases, has been shown quite conclusively.

Of all organs of the body the function of the kidney is most easily accessible to chemical investigation; and in assessing the function of the kidney one considers primarily its capacity to excrete metabolites such as urea, its capacity to excrete water, and its capacity to economise the sodium of the body by forming from urea, ammonia with which to neutralise sulphuric and phosphoric acid formed by the breakdown of protein.

Urea is an almost non-toxic metabolite, tolerated in enormous doses by healthy men. It is unique among the components of the body in that it can travel across cell-membranes without hindrance, so that the concentration of urea found in the water of heart muscle differs insignificantly from that of blood plasma, or that of the brain. Since it is equally distributed, it can develop no osmotic pressure at any boundary inside the body. Being a true crystalloid of low molecular weight, unable to ionise and capable of forming no salts in the body it cannot be affected by any unequal distribution of colloidal solutes (Donnan phenomenon), as are the acid and basic ions of the tissues. There are gradients of urea concentration, true, with a maximum in the liver and a minimum in the renal vein; but these gradients are almost independent of tissue boundaries and at no point is there a discontinuity in the gradient producing a sharp difference in osmotic pressure. If urea be retained in the body as a result of e.g. hypochloræmia, it is accompanied by other metabolites, and this retention is the result of impaired renal function. It is not a compensatory mechanism "to maintain the osmotic pressure in the tissues."

Impairment of renal function due to alterations in the milieu intérieur is particularly common after operations, especially in patients whose kidneys are already damaged; together with other factors, such as alteration in renal blood-flow and blood pressure, and inadequate fluid intake, it frequently causes a minor degree of nitrogen retention. If this nitrogen retention is prolonged, or associated with vomiting, examination of the patient's milieu intérieur becomes imperative. As true tissue fluid cannot be obtained analyses must be made on blood plasma, the composition of which bears a definite relation to that of tissue fluid. Complete analysis of the inorganic ions of plasma being very laborious, it is fortunate that only

three ions are of great importance—sodium, chloride and bicarbonate; and since about 90% of the sodium is balanced by chloride and bicarbonate, analysis of chloride and bicarbonate (alkali reserve) supplies nearly all the information of value to the clinician. The salt disturbances of clinical importance are therefore confined to chloride and bicarbonate.

Disturbances in chloride concentration. Normal range 560-620 mgm. per 100 cc. true plasma (as NaCl.) or 95-106 millimols per litre.

Hypochloræmia occurs in the course of any disease or state which involves marked sweating (e.g., fevers, general anæsthesia) owing to loss of chlorides in sweat (anuria in acute nephritis may be caused by lack of chloride (Gachet 1941)); or vomiting, e.g., pyloric stenosis and whenever there is gross fluid loss as in burns (Underhill et al 1923). It is known, moreover, that hypochloræmia renders the gut abnormally sensitive to trauma, producing reversed peristalsis: thus a vicious circle may be set up, vomiting lowering the plasma chloride, and the lowered plasma chloride facilitating vomiting; this can be cut only by massive saline therapy.

Case 1. An appendicectomy for acute appendicitis was performed on a man aged 50. After operation he vomited repeatedly; thirty hours later his plasma chloride was 174 mgm. per 100 cc. (as NaCl.) and blood urea 220 mgm. per 100 cc. The alkali reserve was normal. Intravenous injection of the calculated quantity of sodium chloride in 5% solution stopped the vomiting immediately, and the patient recovered. It was later found that he had been on a salt free diet for two years.

Hyperchloræmia is rare, occurring spontaneously occasionally in chronic nephritis: post-operatively it may be seen after the infusion of excessive volumes of iso- or hypertonic nitrogen retention. It must be remembered that one volume of normal saline contains as much sodium chloride as 1½ volumes of plasma; while even the healthy kidney cannot excrete a urine containing more than 3.4% sodium chloride. A patient given as his sole source of water isotonic saline may easily therefore develop hyperchloræmia; further, he will retain water in order to maintain his body fluids isotonic, and hence develop marked œdema.

Disturbances in bicarbonate concentration. Normal is 53-77 cc. CO_2 per 100 cc. true plasma: or 24-34 millimols per litre.

Increased plasma bicarbonate (alkali reserve) is most commonly seen in patients who take stomach powders to alleviate the pain of peptic ulcer. Magnesium carbonate and hydroxide are particularly likely to produce this effect since they neutralise respectively two and three times as much acid as does an equal weight of sodium bicarbonate.

Case 2. A patient suffering from duodenal ulcer took thrice daily gr. xxx of powder containing equal parts of sodium bicarbonate, magnesium carbonate, and bismuth carbonate. After eight days his alkali reserve was 95 cc. CO_2 per 100 cc.: his blood urea rose to 78 mgm. per 100 cc. Deprivation of the alkali caused a return of alkali reserve to normal in four days. Fourteen days later his blood urea and urea clearance test were found to be normal.

Increase in the alkali reserve also results from vomiting. A sharp distinction must be drawn between vomiting stomach contents only as in pyloric stenosis, and vomiting stomach and small intestine contents together as a result of obstruction lower down the gut. In the first case, there is loss of chloride as sodium chloride and as hydrogen chloride; the hydrogen chloride leaves behind its sodium in the form of bicarbonate, so that not only is chloride depleted, but bicarbonate is increased, producing the high alkali reserve and low plasma chloride which cause the nitrogen retention seen in this condition. (Clausen and Ringsted 1939.)

Case 3. A man aged 66 developed pyloric stenosis and vomited until frequent aspiration of his gastric contents and replacement with saline was adopted. 24 hours before operation his plasma chloride was found to be 270 mgm. per 100 cc., alkali reserve 85.5 cc. CO_2 per 100 cc., the calculated deficit of sodium chloride being 88 gm. He received 71 gm. Na.Cl. in 4 pints of water intravenously and a continuous drip of tap water rectally, before operation, which was not postponed. 48 hours after operation the plasma chloride was 487 mgm. per 100 cc., alkali reserve 57.4 cc. CO_2 per 100 cc. Apart from atelectasis of the left lower lobe recovery was uneventful.

If obstruction is below the ampulla of Vater, not only gastric secretion, but also pancreatic secretion is vomited. The pancreatic juice contains sufficient alkali just to neutralize the acid of the stomach contents, so that sodium and chloride are lost in equivalent amounts. No alkalosis can develop, but there results a depression of plasma chloride in every way comparable with that of Case 1.

Impairment of renal function, and ketosis (if this is permitted to occur) may lead to the retention or production of acid metabolites, so that the patient obstructed below the duodenal ampulla may actually develop a low alkali reserve, in spite of his vomiting. In any case, after detection and removal of the cause rapid improvement usually results from the provision of an adequate supply of chloride and water, either parenterally or in the diet; though if the condition is not recognised, death may occur. In my experience increased alkali reserve due to alkali medication is recognised much less

readily than that due to the vomiting of pyloric stenosis, and is therefore more dangerous. The occurrence of unusual irritability or excessive somnolence in any patient with the symptoms of peptic ulcer who is receiving alkalis should be an indication for estimation of the blood urea or non-protein nitrogen, and if this is raised the alkali reserve must be determined.

Decrease in the alkali reserve is much more frequent. It occurs spontaneously in the presence of gross structural damage to the kidney; owing to the inadequacy of the surviving renal tissue to form ammonia to neutralise acid metabolites, the bicarbonate of plasma is called on for this purpose. It is seen also in ketosis, where organic acids are combined with much of the available base. The most severe degrees are found of course in diabetic coma (down to 12 cc. CO_2 per 100 cc.); but even after 24 hours deprivation of carbohydrates in the normal adult and in even shorter periods in the child a mild degree of ketosis may be found; it is also induced by general anæsthesia. Obviously, some degree of ketosis in the patient will be frequent after operation. If then inadequate (i.e., less than 60-80 G. daily) patenteral glucose is given the patient who cannot eat is driven to metabolise his own protein and fat and produces an increasing ketosis and an increasing amount of non-volatile acid (phosphoric, sulphuric) to deplete his surviving store of bicarbonate.

In most cases, depletion of the alkali reserve to 45 cc. CO_2 per 100 cc. produces little effect; but where other factors such as structural damage to the kidneys, and low blood pressure, are involved, even this 20% drop may be important.

Case 4. A man aged 45 was subject to a partial gastrectomy. For a week after operation his condition was unsatisfactory, and his blood urea gradually rose to 174 mgm. per 100 cc. At this time his alkali reserve was 45.8 cc. CO_2 per 100 cc. and plasma chloride 576 mgm. per 100 cc. The calculated quantity, 24 gm. of sodium bicarbonate, was given suspended in water in 4 equal doses at intervals of 2 hours through a Ryle's tube. Within 24 hours there was marked improvement in his mental and physical state and his alkali reserve was found to be 68.6 cc. CO_2 per 100 cc. The blood urea rapidly fell to normal and later recovery was uninterrupted.

Combinations of disturbances. It is obvious that all possible combinations of these conditions may occur; increased or decreased alkali reserve without or with hypochloræmia, or simple hypochloræmia.

Exceptions. In emphysema there is a tendency for the alkali reserve to be raised, sometimes to figures well above, and for the chloride to be depressed well below the usually accepted range of normal. If this is suspected, preoperative analysis of plasma to establish that individual's normal is imperative.

Procedure. Urine tests can often be done at the bedside, and therefore should take precedence of blood analysis if possible. This is so for chloride. It is tested for by adding 1 cc. nitric acid to 5 cc. urine and then adding excess silver nitrate. If no precipitate appears the plasma chloride is below 500 mgm. per 100 cc. and is dangerously low. If a thick curdy precipitate appears, the plasma chloride is within normal limits or perhaps raised; intermediate degrees of precipitation may occur and indicate varying degrees of chloride deficit. Most patients can be controlled by repeated urine testing and consequent adjustment of the salt intake. Plasma chloride determinations are needed only occasionally for confirmation or when massive salt therapy is needed.

The bicarbonate cannot be controlled at the bedside. Patients with grossly increased alkali reserve frequently excrete neutral or faintly acid urine. The alkali reserve will be estimated, therefore, far more frequently than the plasma chloride.

For analysis, venous blood is taken with the minimum of stasis and without hæmolysis. A dry sterilised syringe and 10 or 14 gauge needle are best; failing that one washed out with 3.8% sodium citrate. At least 10 cc. blood are taken, the needle removed, and the blood run, mixing gently, into an oxalated container; it is best to add a liquid paraffin seal to avoid loss of CO_2.

The single therapeutic dose. Since it is necessary to call on the laboratory as little as possible the problem is that given a deficit of chloride or bicarbonate, how may one calculate what weight of sodium chloride or bicarbonate is needed to restore the composition of the body fluids to the normal range? This dose having been given to the patient one may call on the laboratory for confirmation; in this way serial analyses can often be avoided.

Let us assume that the patient contains 70% water throughout which the body electrolytes are distributed with a concentration equal to that of the plasma. The mean normal plasma chloride is 590 mgm. per 100 cc.; the bicarbonate 64 cc. CO_2 per 100 cc.

Suppose the patient weighs W kg. and has a plasma chloride of X mgm. per 100 cc. Then his deficit of sodium chloride is 590—X mgm. per 100 cc. body water. In the whole body this is

$$\frac{7\,W}{10} \times 10(590\text{-}X)\text{mgm.} = \frac{7\,W(590\text{-}X)}{1000}\text{grams.} \quad (1)$$

The deficiency of bicarbonate is calculated similarly. 84 Gm. $NaHCO_3$ yield 22,400 cc. CO_2, so that 1 cc. $CO_2 = \frac{84}{22.4}$ mgm. $NaHCO_3$. Hence if the observed alkali reserve is Y cc. each 100 cc. body water needs $(64\text{-}Y)\frac{84}{22.4}$ mgm. $NaHCO_3$ and the whole body needs

$$10 \times \frac{7W}{10} \times \frac{84}{22.4} (65\text{-}Y) \text{ or } \frac{W(64\text{-}Y)}{38.1} \text{gm.} \quad (2)$$

Since the patient is usually sick and cannot be weighed, because overdosage is dangerous, and because sodium is chiefly extra-cellular, it is best to give two-thirds the above dose: for arithmetical convenience, the coefficients may be adjusted slightly.

The recommended doses are, therefore, for chloride

$$\frac{2}{3} \times \frac{7W(590-X)}{1000} = \frac{W(590-X)}{214} G \text{ or, for convenience, } \frac{W(590-X)}{200} G.$$

A deficit of 100 mgm. is therefore corrected by $\frac{100W}{200} = \frac{1}{2}W$ Grams. Nacl. Since isotonic saline contains 0.9% Nacl, $\frac{1}{2}W$ Grams is contained in 55 cc. isotonic saline, so a convenient approximation is " 50 cc. normal saline per kg. body weight for every 100 mgm. chloride deficit."

For bicarbonate, the expression becomes

$$\frac{W(64-Y)}{60} G.$$

Administration of massive doses. Salt loss is always accompanied by water loss, so that generally isotonic saline is a satisfactory fluid to administer parenterally until chloride is excreted again; then glucose or glucose-saline is given. Quite severe degrees of hypochloræmia can, however, exist without clinical signs of dehydration. Rarely the occasion is urgent, the chloride deficit being extreme (Cases 1 and 3): here hypertonic saline may be given, provided that an ample supply of tap water can be supplied either by mouth or per rectum. The concentration may be up to 5 times normal (4.5%). More concentrated solutions are apt to cause pain and thrombosis though they can be used.

Case 5. A woman aged 28 developed a pernicious vomiting of pregnancy which persisted after termination of pregnancy. She became icteric, developed a furuncle, and was found to be severely hypochloræmic. When the furuncle was incised under anæsthesia 200 cc. 18% sodium chloride solution was injected intravenously. Vomiting ceased, and she drank (and retained) nine pints of water in the next eleven hours. Recovery was uneventful

Bicarbonate may be given by mouth in divided doses. In my experience most patients will tolerate 2 Gm. or gr. xxx in water every two hours, or even every hour: but if larger doses are needed they tend to vomit. In such cases quantities up to 8 Gm. (gr. cxx) can be given every two hours directly into the stomach through a Ryles tube (Dr. H. R. Ives, personal communication). Intravenous injection is needed but rarely. Sterilization is difficult since the solution decomposes on heating, but the 6% solution can be autoclaved in mineral water bottles with wired on stoppers, which are filled almost completely and heated and cooled very slowly; under these conditions the carbon dioxide liberated cannot escape and recombines on cooling.

As an illustration, let us suppose a patient weighing 11 stone is found to have a plasma chloride of 270 mgm. per 100 cc. and an alkali reserve of 37 cc. CO_2 per 100 cc. plasma. The calculation is

$$11 \text{ stone} = 11 \times 14 \text{ lb.} = \frac{11 \times 14}{2.2} \text{ kg.} = 70 \text{ kg.}$$

Chloride deficit = 590 − 270 = 320 mgm per 100 cc.

Bicarbonate deficit = 64 − 37 = 27 cc. CO_2 per 100 cc.

$$\text{Chloride requirements} = \frac{70 \times 320}{200} = 112G \text{ or } 70 \times 50 \times 3.2 = 11{,}200 \text{ cc. of 0.9\% saline.}$$

$$\text{Bicarbonate requirements} = \frac{70 \times 27}{60} = 31.5G$$

$NaHCO_3$, or 540 cc. 6% solution.

In such a case, isotonic saline is useless, for 11.2 litres can be given only in two or three days; in 5% solution, however, 112G require only 2,200 cc., or $3\frac{3}{4}$ pints, which is easily given within twenty-four hours. However, the sudden introduction of such a large mass of NaCl. may well disturb the patient unless adequate supplies of water are available. A suitable procedure would be:—

1. Start a continuous rectal drip of tap water.
2. Give one pint of 5% saline intravenously followed by 540 cc. of 6% bicarbonate.
3. Give the second pint of 5% saline, followed by a pint of 5% glucose.
4. Give the rest of the 5% saline followed by 5% glucose.

5. Continue the rectal drip until the patient no longer complains of thirst or until he can retain water by mouth.

The total fluid to be given intravenously is 3,000-3,600 cc., which given at 40 drops a minute or 120 cc. hourly would take 24-30 hours; over half the deficit would be corrected in the first 12 hours. It would be desirable, of course, to test the urine for chlorides at intervals.

The bicarbonate could be given by mouth if circumstances permitted; doses of 2G every two hours, or 8G every three or four hours through a Ryles tube would be satisfactory.

Occasionally laboratory facilities are entirely lacking. Even under these conditions the chloride deficit can be corrected safely if a tube, nitric or sulphuric acid, and silver nitrate are available. The normal range of plasma chloride is 60 mgm. per 100 cc., and if chloride is absent from the urine it is quite safe to give sodium chloride in a dose calculated to raise the plasma chloride by this amount: using (3) the dose required is $\frac{1}{3}$ W grams or 30 cc. normal saline per kg. body weight. If chloride remains absent from the urine after one or two hours, the injection may be repeated until chloride is excreted again; then the usual maintenance dose of 3-4 Gm. NaCl. daily may be given and the water requirements of the patient made up with isotonic dextrose or rectal tap water. This method was recently adopted for a comatose patient whose superficial veins were not only invisible and impalpable, but went into spasm immediately on being touched. After 5 weeks in coma he recovered consciousness and is now convalescent.

It must be remembered that the ideas discussed here are intended to be of assistance to surgeons dealing with patients whose body chemistry has already become abnormal. Prevention is here much better than cure, and if the principles laid down by Avery Jones and Morgan (1938) are followed, this article is unlikely to be needed, though in my experience the daily maintenance dose is 8-12G, higher than that recommended by these authors. In spite of all care, however, difficulties sometimes arise and an acquaintance with the empirical rules given here may occasionally save the life of a patient.

I regret that I cannot in every case acknowledge the source of my material. The cases are selected ones from the practice of St. Bartholomew's between 1935 and 1938 and Hill End during 1942 and 1943 and under present conditions my laboratory records and memory alone have been available. They are drawn from material sent to the laboratory by every surgeon in the hospital. I feel that I owe a special debt to Dr. George Graham, who first interested me in the problems of acid-base equilibrium, and to Sir Girling Ball and Dr. Geoffrey Evans under whose care was the first patient whose uræmia yielded to vigorous salt therapy calculated on the principles set forth above.

Since writing the above my attention has been drawn to a paper by Bartlett, Bingham and Pederson (1938) in which the authors conclude that for every 100 mgm. chloride deficit the patient requires 0.5G sodium chloride per kg. body weight, a figure identical with that given by the calculations set out above.

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A BLACK-OUT IN THE LAST CENTURY

By Major-General SIR CHARLES GORDON-WATSON, K.B.E., C.M.G.

With the approach of winter our thoughts are focussed on the trials of the black-out and it occurs to me that an account of the personal experience of the first black-out in war may be worthy of record.

On October 25th, 1899, the Roslin Castle, the first transport to leave Southampton for the war in South Africa, steamed into the harbour of Las Palmas on a scorching hot day. A cruiser, H.M.S. Niobe, was in harbour to receive transports. Here the first news of fighting reached us—the battle of Glencoe and defeat of the Boers and the wounding of Gen. Symons, who was in command—there was no wireless in those days. About 4 o'clock the same day, having coaled, we steamed out of harbour. On board we had the 2nd Battalion of the West Yorks, under the command of Lt.-Col. Walter Kitchener, brother of Lord Kitchener, General Hillyard commanding the 2nd Brigade and his staff, a Field Hospital, a Bearer Company, a detachment of 2nd Devons, some A.S.C. and A.P.D. units, and last but not least, a contingent of nine civil surgeons, the

first to go out, which included three Bart.'s men, A. E. Wynter, R. W. Jameson and myself.

Shortly before we left harbour an officer came on board with sealed orders from the Niobe, and a tug raced after us to give us more news from the front.

As evening approached, after a steering breakdown and some hours' delay, a rumour went round that we were altering course and going out of the beaten track outward in the Atlantic and, what was worse, there were to be no lights on board.

It had been noted by all that in the harbour there was a torpedo boat flying the German flag. It had been fitted out by Krupp's for the Brazilian Government but not handed over. Our arrival coincided with the coaling of this rather mysterious ship. Rumour had it that it had sailing orders for the same evening. The Roslin Castle could steam at 15 knots, the unknown one at 22 or better. Was she a possible purchase of Kruger's with which "to stagger humanity," his own phrase. These and suchlike thoughts were rife and there was a general desire to see the Niobe close at hand, but the Harlech Castle and the Lismore Castle were due on the following day, and the Niobe must wait to give them orders. Our troops were urgently needed and there was no time to waste. Anyway on that evening the first black-out in war was staged. We dined by candle light, with the port-holes pasted up with brown paper. The ship carried no lights, a cheerful prospect had we been on the beaten track, which we were not. Rifle and ammunition were served out on deck and a guard detailed, though what use could they be! The smoking room was not blacked out, so we could not play cards and could only stroll on deck and speculate on the sudden appearance of the "privateer" or on the sudden explosion from a torpedo!

As I strolled on deck I struck a match in mid-Atlantic to light my pipe, when a voice from the other side of the deck (Col. Kitchener) called out, "Put that light out!"

As we were watching a storm at sea suddenly far away on the horizon a blaze of light appeared. The cry went up, "Searchlight," but it was only the rising moon. And so to bed.

THE BEAUTY OF NATURE

By P. K. Robinson

During these days of difficult travel and short holidays, those of us who love wild places must, to a great extent, live on memories. Nevertheless, there are many evidences of country life in the City.

In the late spring and summer several pairs of black redstarts could be seen and heard amongst the ruins of the Guildhall, Charterhouse, and the scarred City Churches. The fine black cock bird, with its white wing-bar and red rump, and the browner hen bird were very beautiful. It seemed to be the delight of the cock bird to perch on a tall tower or building and pour forth his song—a mixture of warbling and harsh croaking. Catching flies in the evening he was a lovely sight; at one moment perching on a wall, the next, suddenly darting off and catching a fly with the skill of a flycatcher. Returning to his perch, he would wag his tail characteristically, from side to side, and the setting sun would light up his colouring.

In St. James' Park, in the spring, the wild mallard, wigeon, pochard and pin-tail foregathered, having left for a period their lonely marshes to visit this lake, in the centre of the world's largest city.

By Blackfriars Bridge are now several lesser black backed gulls, which have come from their breeding places on inland lakes, or the steep cliffs farther north, while in the Hospital Square, in the evening, starlings congregate in the plane trees and chatter until it is dark.

Bright patches of rose-bay willowherb grow among the stones, in and around the cellars of ruined buildings. Even among bomb débris, this common flower has a beauty of its own, and reminds us of the misty purple carpets seen beneath woodland trees. Yellow groundsel grows along with it. These wild things give rise to a train of thought—of whence they came and whither they are going. For many of the ducks do not stay long, in their urban surroundings, and since the end of July the redstarts have not been heard, and the flowers are now fading and seeding.

The mention of mallard takes me, in imagination, back to a lonely strip of Welsh coast. I stayed here in the spring, at a farmhouse, situated by a mountain stream, which, a quarter of a mile further on, ran into the sea. The beach was sandy here, and at the foot of the sand dunes was a strip of shingle. Behind the sandhills was low marshy land, with patches of scrubby trees and gorse. At that time the gorse was out, and was a blaze of yellow, and gave off a strong coconut scent,

which together with the air from the sea was very invigorating. Both by the shore and inland there was a wealth of wild life to see and study. Several pairs of oyster catchers and ringed plovers nested among the pebbles, above high water mark. The oyster catchers' nests were mere hollows scraped in the sand, amongst the stones, with little protection from the strong winds which blew from the sea. The eggs were wonderfully camouflaged. One of these black and white birds could often be seen on the shore, standing, as if on guard to warn its mate on the nest of approaching danger. They can sight people a long way off, and they have a habit of facing the sea when "on guard"; and when suspecting danger they move further away, keeping their eyes out to sea, and so not giving away the position of their nest. The greyish brown ringed-plover, with its fine black gorget, was running about the sand at low-tide, feeding on shell fish, sand-hoppers or worms. When it reached the shingle it was impossible to see it, unless it was moving. It nested there in a mere scraped hollow, but sometimes it decorated its nest with small fragments of sea-shells. Occasionally a group of grey sanderlings fed on the shore, and ran about, pecking here and there for a worm or mollusc, twittering softly as they ran, and looking like a company of well-fed aldermen. At the slightest alarm feeding stopped, and they all faced the sea, and if necessary, rose, uttering a shrill cry untii they alighted, with quivering wings, some distance away, to recommence their search for food.

Above high-water mark, behind the sand hills, there was a stretch of water edged with tufted grass and an occasional gorse bush. One day I saw a female mallard suddenly fly from a bush at the edge of the water, and on going to look, there was a nest right in the middle of the bush, containing nine olive-brown eggs; but since the bird was circling round, I did not wish to disturb her, so walked away.

Amongst the rough ground many other birds nested—larks, peewits, pipits, and stonechats—each having their own interesting song, habits and appearances. One day, I disturbed a heron feeding in a stream five yards away. Greatly startled, it spread its great wings and flew off. In rain or sunshine, dippers were actively searching underwater for food, in the stream by the house; coming up at intervals to perch on the stones, surrounded by swirling water. Wagtails were most often seen as flashes of white, as they flew upstream under the ivy-covered bridge.

The cry of the curlew was often heard—near the coast at low tide, and up on the moors. As it was spring its tremulous love song filled the air. The singer would rise and fall with fluttering flight, producing a torrent of liquid notes, uttered faster and faster as it came earthward. It was a rare pleasure at nightfall to hear the curlew and the larks still singing, intermittently, with the music of running water as accompaniment.

Flowers were abundant, too. The woods were carpeted with bluebells and patches of primroses; violets and lady's smock grew unobtrusively in the lanes; on the boggy ground were groups of buck bean, a pink and white feathery plant; the small, blue-flowered milkwort grew half hidden in the grass, amongst dwarf purple orchids.

Every part of this strip of coast and its hinterland had some interest for the patient observer. One of the most amazing things about it was, that the scene itself had beauty and grandeur in its composition, but every minute part which went to make it had a fascination of its own. Every living thing has beauty in its form and colour. To the average individual, natural scenery is beautiful enough, but anyone who has studied the form of animals and birds knows how wonderful is the intimate structure of their bodies. Whether we are so trained or not, in places like this we can find great happiness. Here is a fund of vital interest, which increases as we get to know it better. Here is life, with all its intricacies and complications, and yet it is in such places that we can attain peace and serenity, so long as we approach humbly. The secrets and the joys of nature are not experienced by the arrogant or the impatient. If we will go quietly, we can gain a great deal from the wild places. When we get away from the towns, and the rush of civilization there is a quietness, which can almost be felt. All the artificialities of modern life leave us, and we are free to enjoy the simple pleasures of the open air—simple, yet so rich in interest, to those familiar with them. Then the beauty of the countryside is manifest in its vastness and its minuteness, and one wonders at such creation. The more one knows of animals and flowers and living things, the more one loves them. Rupert Brooke reminds us of

"Rainbows: and the blue bitter smoke of wood;
And radiant raindrops couching in cool flowers;
And flowers themselves, that sway through sunny hours,
Dreaming of moths that drink them under the moon; . . .
Firm sands; the little dulling edge of foam

That browns and dwindles as the wave goes home; . . ..
Sleep; and high places; footprints in the dew;
And oaks: and brown horse-chestnuts glossy new;
And new-peeled sticks; and shining pools on grass;—"

This love of the countryside and the happiness it brings is partly an attitude of mind. It does not necessarily come to those with great possessions, indeed money cannot buy it. That people have experienced it for a long time, is evident from literature and poetry—from the Psalmist onwards. I recall a conversation in "Lavengro" in which Jasper says:—

"There's night and day brother, both sweet things, sun and moon and stars, brother: all sweet things: there's likewise wind on the heath: who would wish to die?"

"In sickness, Jasper?"

"There's the sun and the stars, brother."

"In blindness, Jasper?"

"There's wind on the heath, brother: if I could feel that I would gladly live for ever. Dosta, well now, go to the tents and put on the gloves and I'll try to make you feel what a sweet thing it is to be alive brother."

In nature there is something to see in all our moods, and usually something which reminds us of our own small part in the scheme of things; and yet serves to remind us of the potential beauty and possibilities of man and to encourage us. We can by approaching nature gently, gain great enjoyment and peace of mind; and help ourselves to see beauty and find pleasure in our "common" life. This philosophy is admirably summarised by Edward Wilson, when he says, "Let our joy in life be in the free gifts of God, for which we never even asked, and we shall be too happy even to wish to leave them and begin to look for higher things. Never let us fix our hearts on anything in such a way that it can affect our spirits, or our appreciation of the joys and the beauty, and the blessings, that are showered on us every single day we live. If we can only grasp this fact, that so long as we don't plan big or little joys for ourselves in life, God will most certainly give us the most heavenly power of enjoying little things, which in our selfish eagerness for our own ideas of happiness, we are treading underfoot, every day, just where we are."

A PSYCHIATRIST'S FANTASY

By S. M. COLEMAN

It was early afternoon and I was enjoying a brief doze before the fire, a pardonable habit in late middle life, when there was a knock at the door. I hastily assumed a more impressive position at my desk as the porter entered. There was a gentleman who would like to see me; no, he had no appointment, but the name aroused my curiosity, for it was one closely associated with the early history of my hospital. I asked the porter to show him in.

An old, but alert, gentleman of trim appearance entered. "How do you do, Mr. Kute?" I said, rising from my chair. "It is a great pleasure to meet a member of the family that has done so much not only for this hospital but for the cause of the insane in general." And I motioned him to a chair. He told me that he was in the district only for a short stay and remembering well from boyhood the beautiful old buildings and pleasure grounds, had taken the opportunity of visiting the asylum.

"Not asylum, sir," I interrupted, "this is a mental hospital and a very up-to-date one, too."

"Mental hospital, if you prefer it," he rejoined, "nevertheless asylum is a beautiful old English word with the happiest conotations. I must admit it came as rather a shock to me to find the old buildings and gardens gone and, in their place, these curious little redbrick villas, rather like a garden-city."

I saw he was distressed and hastened to explain that the old buildings, beautiful as they undoubtedly had been, were totally unsuited to the needs of a modern institution. The new lay-out had been, in fact, one of my earliest achievements and one of which I felt justly proud. I saw he remained unconvinced and went on:—

"Certainly it was your distinguished relative," and I waved my arm towards the mantelpiece, where there hung a portrait of that very unrepresentative example of his class, the eighteenth century gentleman; "who added humanity to the treatment of the insane, but," I added, "it has remained for our generation to add science."

While I was speaking he got up and walked

towards the print. It presented a kindly, if austere, old gentleman of that period, whose mission it had been to strike off the chains, put a stop to the beating and other abuses of the unfortunate inmates of lunatic asylums.

"I am afraid I have not kept up my association with these hospitals," he said. "Chance has led me into other walks of life. But, now that I am here, would it be too much trouble if I asked you to show me round the hospital. I should like to see how science has built on the foundation laid by my relative."

I assured him that it would be no trouble and guided him out into the grounds. As we walked towards the treatment centre we discussed the latest war news and Mr. Kute said that it seemed terrible to him that man should for ever be using science only to invent more lethal weapons in order to destroy his neighbour. I whole-heartedly agreed, suggesting that it is as if a child were given a charge of dynamite to play with. He is incapable of putting it to any useful purpose.

As we entered the treatment centre, I said, "I think you should first see some patients undergoing malarial therapy. I am showing you this method first because its discovery marks the beginning of the modern era—the treatment of mental illness by physical means."

"What is the rational?" he queried. I explained that high fever had been found to benefit this particular mental illness and also that it had been noted that where malaria was prevalent this form of insanity was seldom to be found. In the ward I saw that one patient was in rigor and I drew Mr. Kute's attention. The patient was muttering deliriously, shivering and trembling. The temperature registered 105° F.

"Is the treatment very unpleasant?" my companion asked. "Well, of course," I had to admit, "a rigor isn't exactly pleasant," but added, "The results justify the temporary unpleasantness."

"You mean they recover?"

"No, I am afraid they don't all recover, but instead of rapidly dying, the bodily health markedly improves, even if the mental state remains unaltered."

He made no further comment and I lead him into the next ward, where insulin treatment was still in progress. I explained that this therapy produced coma and sometimes fits and that we had excellent results in a proportion of cases. No, I could not tell him how it worked. A colleague had suggested that it was an endocrine kick in the pants. Mr. Kute seemed rather struck by this.

"Our most recent acquisition is this," I said, showing him an imposing piece of electrical apparatus. "We use it for inducing convulsions." "Are there any risks?" he asked. "Well," I had to admit, "fractures and dislocations do occur and some workers suggest that the severe memory lapses, which are sometimes permanent, are due to small brain hæmorrhages induced during the fit. But I think the end justifies the means. I am afraid I cannot show you the next form of treatment in action. It is used as a last resource, when other methods have failed. It consists in cutting through and severing a part of the brain. After this operation, violent and dangerous patients become benign and quite childlike. Some can even engage in useful occupations of a simple nature."

"There is one last method of treatment I would like to show you. It is called prolonged narcosis. We use it for our mildest cases and it consists in sending the patient to sleep for from ten to fourteen days."

"Do most of them get well?" I was asked.

"Yes, quite a proportion do and those that don't are then given the more drastic methods."

"You mean they get them one after the other; insulin shock and then the convulsive treatment?"

"Yes, and if they all fail, perhaps the operation leucotomy."

"With the sleep treatment do they ever not wake up?"

"Oh! most of them wake all right," I was glad to assure him.

"It seems a pity," he said.

As we left the treatment centre I pointed out the animal house and offered to show him round the experimental laboratories, where the various treatments were tried out on rabbits and guinea-pigs. He intimated, however, that he would have to forgo that pleasure, since he was pressed for time.

Walking towards the lodge gates, I expressed my regret that we no longer had a member of his illustrious family on the governing body of the hospital. I was taken back a little by the fervour with which he endorsed my opinion.

A SICK-BAY INCIDENT

In the earlier stages of the war when H.M.S. "Exeter" put up such a good fight and helped to knock seven bells out of the Jerries' prize battleship—a shell landed on the "Exeter" in close vicinity to the Sick Bay. An executive officer felt the bump and dispatched a messenger to the Senior Medical Officer (who had his hands full at the time) and he told a sick berth attendant to take a message to the waiting "runner," to the effect that it was *not* a direct hit on the Sick Bay. The reply was rather curt, and no wonder, for the place was a shambles.

The sick berth attendant, a grey-headed ironic old sinner, delivered the reply in this manner:

"'Ere you! you say Jimmy-the-I wanted to know if that noise was an 'it on the 'Ospital. What did he think it was, an attack of the bloody hiccups?"

D. E. WYNDHAM, *Surg. Comdr.*, D.S.C.

ANNOUNCEMENTS

BIRTHS

BREWERTON.—On Sept. 15th, to Sylvia, wife of Lieut. R. S. E. Brewerton, R.A.M.C., a son.

MARRIAGES

CANE—MILLAR.—On April 6th, 1943, at St. Alban's Church, Dar-es-Salaam, Tanganyika, Hugh Cane, M.B., elder son of Dr. and Mrs. Cane, Bungay, Suffolk, to Margaret Millar, eldest daughter of Mr. and Mrs. James Millar, Symington, Lanarkshire, Scotland. Dr. N. Chitton, also of St. Bartholomew's Hospital, acted as best man.

The JOURNAL wishes to remind its readers that a charge of 1s. per line is made for announcements printed in this column. All communications should be sent to the Editor at the JOURNAL OFFICE.

CONSCIENCE

I think most people would agree that the average Bart.'s student is a conscientious sort of fellow. For example, a student having "signed up" prior to the commencement of a lecture, finding that his duties necessitated his being elsewhere at the time of the lecture, would, I am sure, immediately eradicate his name from the list before leaving to execute his duties. Recently I heard an interesting story from a fellow student which illustrates what an important part conscience has played in his life, and, although the story is against himself, he has given me permission to recount it.

It was one of those sultry July days when every movement is an effort and one dreams of shaded verandahs and iced drinks. My friend —from now on referred to as Mr. K.—was alone on duty in the Casualty Clearing Station, his colleague having taken his leave because "it is ten to six, old chap, and you can't keep a woman waiting when you've got a date; besides no one will come in in ten minutes anyhow." There he sat in the murky gloom waiting for the big hand to reach the hour, while through his mind passed thoughts of kaolin poultices—was it ten or twelve he had made that day?—and then his landlady, Mrs. Toggle, with another "nice herring for your supper, Mr. K.!" The thought of having to make a thirteenth kaolin poultice was almost too much for him—besides it would be unlucky—and so he decided that he should go. The man from the West Wing might be early, and anyhow, no one would miss him in ten minutes.

But Mr. K. had a conscience and, with grim determination, he pulled his white coat around him, and prepared himself for five minutes of the worst. The worst arrived on a stretcher at three minutes to six! But Mr. K. was ready for any emergency, and was washing his hands with the air of a surgeon with at least one F.R.C.S. A house-surgeon appeared and advised Mr. K., "Clean up his head, and put some sutures in, and then give him some A.T.S., will you, K.? And before you go there's a fellow over there with a bad ankle. Put some strapping round it and tell him to come back in a week. O.K.?" A rather feeble "O.K." from Mr. K. indicated that it would be done. Mr. K. was proficient in the art of suturing in theory, having recently read Sir Harold Gillies' article in the Bart.'s Journal, but in practice the art of tying the sutures still remained a mystery to him. However, he had his own method and all was going well until, "You'll scalp him if you tug much

harder," was breathed in his ear. The operation was eventually completed, and Mr. K.—a little disturbed by the houseman's words—set off to strap an ankle. But as fate would have it, he came face to face with the houseman, who seemed to think that a little practical tuition in the art of stitching was indicated, and that right early.

Eventually, a very tired Mr. K. crept into the humble abode of one, Mrs. Toggle, and, having toyed with a herring for about half-an-hour, he settled himself in an armchair by the window and prepared himself for the pangs of indigestion which inevitably followed herrings cooked the Toggle way. Mr. K. being, as I have said, a conscientious fellow, could not sit idle for long, and reaching for his Conybeare, he opened it at random and started to read. But his thoughts were elsewhere, and he wondered to himself what his colleague was doing with his latest lady friend—an A.T.S. girl this time.

Mr. K. went on to tell me of how the capitals " A.T.S." were associated with a feeling of acute anxiety, and for some time he was at a loss to know the reason why. Then suddenly he realised with horror that he had forgotten to give his patient the A.T.S. injection as instructed. Thoughts of the poor old man lying in bed with jaws locked and neck rigid were interrupted by the entry of Mrs. Toggle with, " Your nightcap, Mr. K., and I'm sure you've earned it to-day." Mr. K. was not so sure. His anxiety was rapidly becoming chronic, and seeking comfort, he asked Mrs. Toggle if she had ever heard of a disease called " tetanus." This was a change in policy on Mr. K.'s part, for he had learnt from bitter past experience that once Mrs. Toggle started talking there was no stopping her. After an hour's solid talking Mr. K. learnt that the Toggle strain was a pretty resistant one, and that illness was hardly known to the Toggle family. She had certainly never heard of " tetanus " and the only illness she could remember was when " poor little Ernie got carried off so sudden with the lock-jaw. So sudden it was, Mr. K. . . .," and with that she left the room in tears. Mr. K. passed a sleepless night that night—the sad story of Ernie Toggle had moved him deeply—but he tells me that, by the early hours of the following morning, he had learnt more on the subject of tetanus than he could normally have learnt in a week.

People who saw Mr. K. later that morning said that he was different .Firstly, he was in the Out-Patients' Department *before* nine—something that had never occurred before as far as Mr. K. was concerned—and secondly, he looked as though he'd been working (which, indeed, he had)—also something which had seldom occurred before. He searched the Out-Patients' Department looking for someone with " risus sardonicus " and a bandaged head, but in vain; and on enquiring later in the morning as to whether anyone had seen a patient with a cut head complaining of " a stiffness or rigidity of the muscles of mastication," he was unlucky. So Mr. K. decided that a second opinion on the matter was indicated, and with some trepidation he sought his friend the house-surgeon. As a result of the interview it was decided that Mr. K.'s patient must be found and given his A.T.S. injection. After a search through about eighty cards (Mr. K.'s patient had a very common name) the address was found, and Mr. K. prepared himself for a journey to 107, Cardington Street, Lambeth.

After a journey involving rides by tube, bus and tram, and a considerable walk, first in one direction and then in the opposite direction (no one seemed to have heard of Cardington Street), Mr. K. reached his destination. His patient welcomed him with open arms and said that he never realised that the Bart.'s " follow up " scheme was so efficient! Mr. K.—feeling considerably better at finding his patient still alive—asked a few questions chiefly concerning neck rigidity, and, after a while, tentatively suggested that a ninjection at Bart.'s might be a good thing. To his surprise, his patient was fully agreeable and exclaimed that if Bart.'s were good enough to send a doctor to him, how ungrateful he would appear if he did not go to Bart.'s as advised. (Mr. K. assures me that he really did use the word, " doctor.")

The return to Bart.'s was apparently uneventful, and in due course the injection of A.T.S. was given, and the patient advised as to when he should return to Bart.'s to have his stitches removed.

The story ends with the return of a somewhat weary Mr. K. to that haven of peace and quiet—namely, Mrs. Toggle's. On opening the door he was greeted by the inevitable aroma of herrings, but as he explained to me, " You can face anything—even a herring cooked the Toggle way—if your conscience is clear."

P. R. N.

THE PATHOLOGY OF SONG

Recently I became involved in an interesting and quite unique discussion, so that I resolved to set down as soon as possible the facts which emerged therefrom, and perhaps transmit the substance of these to others.

My informant was a middle aged man who happened to occupy the same table in a restaurant at tea-time, and I was immediately intrigued by his rather unusual manner. He was small, alert, and seemingly intolerant of everyone present, particularly the waitress, who was careless enough to deposit a crumpet upon the shoulder of his coat, together with a quantity of tea and boiling water. He made rather more of a scene over this incident than I felt was necessary in so public a place, but it was readily apparent that he did not attach much weight to anyone else's opinion of himself, though I fancy he compensated for this pretty adequately with his own.

For a few minutes we conversed on general topics; he informed me he was a doctor, and evinced no particular interest when I expressed the hope that the examiners would be charitable enough to allow me to follow the same profession in due course.

It was then that the discussion opened, for very abruptly he inquired if I had ever considered the medical significance pertaining to the words of various popular songs. I replied that my knowledge of psychiatric matters was somewhat sketchy, and that as far as I was concerned they had no significance whatever.

"I see you have not grasped my meaning," he said. "I am not interested so much in the psychological basis which prompts these compositions, as in the pathological changes which might be supposed to have occurred in the subjects of these songs."

I confessed that this was an aspect of applied medicine which I had so far overlooked, and excused myself somewhat half-heartedly by murmuring something about an overloaded curriculum.

"Let us consider a simple example," he continued, obviously warming to his subject. "You will no doubt have observed how often in popular compositions, the singer experiences a 'thrill,' usually when brought into contact with the current object of his desires. What do you imagine is the pathological explanation of this thrill?"

Frankly I was still somewhat nonplussed at this remarkable intellectual hobby of my acquaintance, and on the spur of the moment could only hazard the opinion that the phenomenon was possibly the legacy of an attack of rheumatic fever earlier in life.

"You think a cardiac thrill is being referred to on these occasions?" he asked. "I inclined to that view myself at one time, but I am bound to say that while I recognise the wide prevalence of the rheumatic heart, I regard it as unlikely in the light of further consideration. Assuming the thrill referred to is in actual fact cardiac in origin, we must suppose that it is in every case a palpable thrill. Therefore I consider it most unlikely that these people can achieve such a wide variety of other activities, many of them obviously calling for considerable stamina, when they possess at the same time such gross cardiac lesions."

This seemed rational enough to me, so I inquired what conclusions he had arrived at.

"It could not conceivably be a fluid thrill, otherwise," he added, "we must accept the disturbing idea that many individuals are at large with undiagnosed ascites; a supposition which fails to reflect the slightest credit upon our profession. It is equally unlikely that massive effusions are present in other serous cavities, or even that a hydatid thrill is being elicited. "No," he continued, "the heart is so often referred to in this connection, that we must provisionally accept this organ as being the seat of these physical signs. Whether an organic lesion is present it is difficult to say—I incline towards a neurotic explanation myself, and this is certainly in keeping with many of the other sentiments expressed in the songs."

By this time I had begun to realise the absurdity of explaining these conditions literally, but the doctor was not to be put off, for he continued thus: "The strings of the heart are occasionally credited with movement of one sort or another, and I am quite certain that it is the chordæ tendiniæ which are being referred to. Fairly substantial proof of this can be obtained from experiments on the dog, but I have not so far met any human subject who is prepared to acquiesce to such experimental observation."

I was quite certain that he never would either, and I had by now found his complete obsession in the morbid changes of so trivial a subject not a little repellant. He did not appear to notice this, and after a few moments' reflection produced a further item for consideration.

"In these songs," he said, "people often

refer to a state of depression by maintaining they are 'blue.'"

Maliciously enough, I contended that they were probably suffering from an overdose of some sulphonamide or other. He gave no sign that he had recognised the intentional fatuity of such a remark, but merely dismissed the theory with an impatient gesture of his hand.

"You are obviously unaware," said he, "that the word BLUE was in use in this connection at least ten years before the drugs you mention were actively employed therapeutically."

"Well then," I replied, still inclined to ridicule the whole matter, "they are all cyanosed. A man with 'blues in the night' is clearly an individual who is in an orthopnœic state and becomes cyanosed when lying down in bed."

"An ingenious explanation," said he, to my surprise and discomfiture, "I am not sure you are not right there. The presence of the cyanosis is a little obscure, however."

I now began to take more interest as I saw the first chance of impressing the man opposite me. I had recently concluded an exhaustive study in the various modes of production of the cyanosed state, rather more for the benefit of the examiners I was about to face, than for any interest the subject afforded to myself, it is true. I duly rattled off this list, but he did not appear in the least impressed. "I know the causes of cyanosis, probably as well as you," he observed, a little pointedly, I thought, "and the same objections apply broadly as those I outlined when dismissing the rheumatic theory of heartaches, thrills, and the other associated cardiac phenomena. Incidentally, now we are back on this subject, an electrocardiograph of susceptible subjects might go a long way towards establishment of the ætiology of these conditions.

The farthest we can proceed on the matter of the BLUES is that a cyanotic state undoubtedly exists, whether it is endogenous or exogenous is not altogether certain, though the condition is happily transient in the majority of cases.

"These are several of the more common clinical conditions encountered in popular songs," he added, "but there are others less common, though none the less interesting. We find several references to cranial disorders, and one, though I do not at present recollect the precise words, portrays quite clearly a post-encephalitic state. In addition I can recall at least three well authenticated effusions likening a female acquaintance successively to the Mona Lisa, the tower of Pisa, and other objects whose connection appears obscure in the extreme. These we may lay at the door of alcohol, or (with a malicious grin) the ubiquitous spirochæte. Yet another song describes a third party getting 'under the skin' of the singer. This may well illustrate the transmission of some contagious skin lesion, though again the whole matter can be quite satisfactorily explained on the basis of a cerebral disorder. This is perhaps the most fertile field of all for research and I regret that I am unable to discuss the matter further as I have an urgent appointment." So saying he rose and hurried out, handing the waitress some money on the way out.

I was not altogether sorry to see him go, for I had by now a persistent suspicion that the "ubiquitous spirochate" might well have settled down at his door also.

A. V. L.

All contributions for the next (December) issue of the JOURNAL should reach the JOURNAL office, in the pathology block, by November the 8th.

It should be emphasised that the JOURNAL welcomes descriptions of any interesting or unusual cases that may come to the notice of its readers; also any who fancy themselves as poets are encouraged to send in their compositions. Articles of any kind, humorous or otherwise, are always welcome. Caricatures or other drawings are needed; there have been few offered for publication, lately.

There have been many requests for further "Candid Camera" snapshots. It is greatly hoped that some readers will assist the JOURNAL by producing further photographs, in spite of the shortage of material. Film and camera can be borrowed for this purpose, on application to the Editor.

CORRESPONDENCE

To the Editor, St. Bartholomew's Hospital Journal

Dear Sir,

Hearty congratulations on the Fiftieth Birthday of the JOURNAL.

I was present as a student at the meeting held, I believe, in the Abernethian Room, when the project of a JOURNAL was discussed, and I have read every number that has been produced. I have contributed several articles to your columns, one in one of the earliest numbers and the last, in 1922, on Duodenal Ulcer, which occupied several pages.

May the JOURNAL long continue its useful work of not only instruction but amusement. I always read the "lighter" contributions first, but do not understand the topical illustrations as I am out of touch with the present staff.

The contribution by the son of my old teacher, Sir Francis Champneys, is of particular interest as I am old enough to remember the technique of those days which still survived in the country twenty years later when I was a student.

With all good wishes for the future of Bart.'s and the JOURNAL.

I remain,

Yours faithfully,

GEOFFREY LOWE.

2, Curle Avenue, Lincoln.
October 10th, 1943.

To the Editor, St. Bartholomew's Hospital Journal

Dear Mr. Editor,

I was very interested to read in the current issue that ST. BATHOLOMEW'S HOSPITAL JOURNAL has reached the 50th anniversary of its foundation. It was my privilege to edit the JOURNAL from 1918 to 1921, and I take this opportunity to express the hope that it will long continue to flourish.

At the same time I should like to congratulate you on your excellent editorial.

Incidentally, I had no idea that the JOURNAL travelled so far afield. Last November I contributed a note on Vincent's Infection, and, my my surprise, find that it has been reprinted in the April issue of the "New Zealand Dental Journal."

With all good wishes.

Yours sincerely,

J. BRAMLEY WHITE.

To the Editor, St. Bartholomew's Hospital Journal

Sir,

May I underline what, to me, is a most important point in your excellent October Editorial—that, from Cambridge, St. Albans and Barnet, the centre of Bart.'s is Bart.'s. For Plans can be correct in form and Planners unanswerable by logic, yet neither can allow for the weight of imponderables such as tradition and example. Surely then must we remember here in this imperial city is the dwelling-place of the spirit of Bart.'s, compounded of all the good that men have left to live after them in the eight centuries of our inheritance. The very stones here radiate those influences for those who will but attune their sensibilities to receive "manners, virtue, freedom, power."

RALPH PHILLIPS.

St. Bartholomew's Hospital, E.C.1.
October, 1943.

To the Editor, St. Bartholomew's Hospital Journal

Sir,

Mr. Merritt's ideas on war are much too naive to pass unchallenged. Firstly, he does not take his own advice; he does not treat the subject on medical principles. He ignores the history of war. Had he studied it he would have known that men living in family groups rarely fight at all, and when they do the cause of the trouble is women rather than "lebensraum." Secondly, the history of civilisation shows quite plainly that war can be creative as well as destructive, and so cannot be regarded as an unmixed evil. Thirdly, Mr. Merritt neglects the medical principle of multiplicity of causes. No reaction of a living creature is the simple effect of a simple cause, but the result of many interesting factors. Hence he should hesitate to think that economics are the only cause of war. The matter is much more complex than that as may be gathered from such books as Dawson's "The Age of The Gods," and Perry's "The Children of The Sun," and "The Growth of Civilization." To say that the Crusades were undertaken only to protect trade routes is just a plain lie. It may be true of Venice and Genoa; it is certainly not true of St. Louis. Fourthly, the main argument is a non-sequitur unless I have quite misunderstood it. I have tried to put it in the form of a syllogism and the best I can do is as follows:—

The selfish power of sections is the cause of all war.
The governments must acquire the selfish power of sections.
Therefore there will be no selfish power of sections to cause war.

This is not a valid argument; it defies logic. A sound syllogism can be made of it, but the conclusion is very different. It is:—

The selfish power of sections is the cause of all war.
The governments must acquire the selfish power of sections.
Therefore the government must acquire the cause of all war.

If the governments acquire all cause of war, it does not seem to follow that there will be no war. That might, or might not, be the case, but the premises do not warrant that conclusion. In other words, the amicable agreement between governments that Mr. Merritt postulates might not be reached.

Concerning Mr. Merritt's suggestion that members of Parliament should be paid as handsomely as judges, it may be remarked that the functions of a legislative are not in any way analogous to those of an executive. To make membership of Parliament a lucrative career is to encourage yes-men and opportunists.

I am, Sir,

Your obedient servant,

G. H. CRISP.

St. Bartholomew's Hospital, E.C.1.
October 17th, 1943.

Dear Sir,

One of your correspondents in last month's JOURNAL raised that old question of Students' Union elections. He suggested, firstly, that each candidate should make a short speech which would enlighten the voters on the policy he would pursue if elected and enable them to judge his character and qualifications to some degree, and, secondly,

that power of recall be vested in the electorate, which would keep the representatives up to scratch. These proposals and the arguments leading up to them would be perfectly good if they were not based on a misconception. The first function of the Council of the Students' Union, to which the students' representatives are elected, is "to manage the affairs of the Union," and the primary object of the Students' Union as set out in its constitution is "promotion of social intercourse and unity of interest among its members." Do the voters need any great statement of policy from their prospective representatives before they are able to do this? Any candidate with a policy which involved major changes in the functioning of the Union would not find that election to the Council would assist him, as that body has not the power to carry out such changes. They could only be brought about by the decision of a Special General Meeting of the Union which every member could attend, and it is not necessary to be a member of the Council to call such a meeting.

Apart from this I am sure that the main body of students do not wish to be bothered with all the electioneering machinery which would certainly be set up by certain elements among them. At a recent meeting at Hill End, at which the President and four officers of the Union spoke, there was an attendance of about one-half of the available students at that hospital. If that was the response to such a meeting in a portion of the college where the students probably have more free time than at any other period in their course, what proportion of the students as a whole are going to take the trouble to listen to election speeches?

Yours faithfully,
A. E. FYFE,
Secretary of the Students' Union.

To the Editor, St. Bartholomew's Hospital Journal

Sir,

I think that all who have attended meetings of our Students' Union Council would agree that the demands made upon them as student representatives do not require much fixity of views; indeed, perhaps the best qualification is to be a "good fellow."

Those who sometimes decry a little hastily their student representatives cannot know that four-fifths of the Council's work is simply administrative in character, while to the questions of policy which from the other fifth it is often best to bring an open mind, prepared to be guided by precedent and to attend to other and wiser counsels.

Furthermore, the suggestion that there should be a mechanism for recalling any "good fellow" who succeeded in campaigning their way into office past the vigilance of such an intelligent and attentive electorate is derogatory to that electorate and as unsatisfactory as is the idea that our Council shall become a political machine.

I am, Sir,
Yours, etc.,
ANTHONY ALMENT, Student.

St. Bartholomew's Hospital,
London, E.C.1.
October 14th, 1943.

To the Editor, St. Bartholomew's Hospital Journal

Dear Sir,

Perhaps I completely lack subtlety, but I fail to be amused or enlightened by the article "My First Female Patient" in the October edition of the JOURNAL.

First, I assumed that Mr. A. R. C. intended to be amusing. Does the use of bad grammar, slang (such words as guy and stooge) and the experience of "hangovers" constitute humour?

Secondly, I endeavoured to gain some insight into female psychology. The primary reservedness of patients is surely common to both sexes? The mistaking a medical student for an Insurance Agent does suggest amazing ignorance; but is this character specifically female?

Thirdly, I endeavoured to learn something of the psychological state of a medical student before and during his interview with his first female patient. After reading approximately seven hundred and fifty words, I gathered that such a student, in such a situation, is nervous; a fact of which I was already aware.

Perhaps, however, the aim was neither to be amusing nor enlightening.

We preclinicals look to our seniors (especially at Hill End) for intellectual guidance and example. Please help us by occasional enlightenment, and (dare I broach the subject?) humour, the October "At Hill End" was tolerable.

I applaud especially Mr. S. P. Lapage's letter, but I feel that a problem even more fundamental (at least at Cambridge) than elections is the understanding of the apparently highly complex and intangible maze—the organisation known as the "Students' Union." Only when we are agreed upon this fundamental should we be in a position to appreciate the aims of our would-be officers, and hence decide upon the suitability of candidates, and later commend or disparage their efforts. At the moment in Cambridge the word "Union" bears little or no relation to "Students."

I am, Sir,
Yours faithfully,
D. S. GUHA.

P.5, Queen's College,
Cambridge.
October 12th, 1943.

[We regret that some of our readers are so constructed as to be unable to appreciate what we believe was an excellent attempt at applying Mr. Damon Runyan's style to medicine. If every article in the JOURNAL supplied intellectual guidance or spiritual enlightenment, we feel that the same readers would very soon be out of their depth. A true sense of humour is the most important single factor necessary to view this world (and the next) in correct proportion. Without it we are lost. We can only add that if there seemed to be nothing amusing or witty in "My First Female Patient," in spite of the above explanation of its quite plain imitation of Runyan, then it is a case of "it was not mice, it was a shell."—ED.]

We received the following letter, which we would bring to the notice of all our readers:—

ROYAL MEDICAL BENEVOLENT FUND,
1, Balliol House, Manor Fields,
Putney, London.
September 13th, 1943.

Sir,

It is my custom each autumn, through your columns, to invite my medical colleagues to take their part in the Christmas Gifts Fund of the Royal Medical Benevolent Fund.

This scheme, so generously supported by many, has become very remarkable, as it has been the means not only of bringing to many old and lonely people a gift of friendship and sympathetic under-

standing at Christmas time, but it has also given many of your readers an insight into the great work which the Royal Medical Benevolent Fund is doing daily in helping medical brethren, or the widows and children of deceased medical practitioners, who are in financial difficulties.

We look upon the Christmas Gift of £2 to each beneficiary as something "extra," but I must emphasize that the regular allowances have to be paid throughout the year. New annual subscribers are very urgently needed for our general funds, and surely it is for the present generation of practitioners to take up their share in the work which is a common professional inheritance and tradition.

It is not difficult to realise what happiness and comfort a Christmas Gift of £2 brings to an old doctor, an aged widow or daughter living alone, possibly suffering from illness or infirmity. We, ourselves, know the difficulties and discomforts of our own lives caused by the present war. May I appeal, Sir, very earnestly on behalf of those who have suffered so much more than ourselves?

I venture to make this letter a TWO-FOLD appeal—

(a) To all regular subscribers, to send their "extra" for the Christmas Gifts Fund.

(b) To all others, to show their practical sympathy by becoming subscribers to our general funds.

I do not ask for large contributions.

Christmas Gifts donations should be marked "Christmas Gifts," and all cheques made payable to the Hon. Treasurer, Royal Medical Benevolent Fund, 1, Balliol House, Manor Fields, Putney, S.W.15.

Yours faithfully,

THOS. BARLOW,
President.

19th October, 1943.

RECENT PAPERS BY ST. BARTHOLOMEW'S MEN

CORSI, HENRY. "Therapeutic Uses of Thorium-X." *Lancet*, September 18th, 1943, pp. 346-8.

DALE, SIR HENRY. "A Prospect in Therapeutics." *Brit. Med. J.*, October 2nd, 1943, pp. 411-6.

DALLY, J. F. HALLS. "Treatment by Sulphaguanidine especially in Bacillary Dysentery." *West London Med. J.*, July, 1943, pp. 45-9.

FINZI, N. S. "Discussion on the Future of Radiotherapy in Dermatology." *Proc. Roy. Soc. Med.*, August, 1943, pp. 569-70.

HAMILTON, W. J. (and Barnes, Josephine, and Dodds, Gladis H.). "Phases of Maturation, Fertilization and Early Development in Man." *Pros. Roy. Soc. Med.*, August, 1943, p. 525.

JEWESBURY, ERIC C. O. "Misuse of Intravenous N.A.B. for Vincent's Infection." *Brit. Med. J.*, September 18th, 1943, pp. 360-2.

MAXWELL, JAMES. "Recent Advances in Treatment: The Respiratory System." *Practitioner*, October, 1943, pp. 204-9.

WEDDELL, GRAHAM. "Electromyography in Clinical Medicine." *Pros. Roy. Soc. Med.*, August, 1943, pp. 513-4.

WILLIAMS, H. C. MAURICE. "Cutaneous and Conjunctival Diphtheria: A Series of Cases." *Brit. Med. J.*, October 2nd, 1943, pp. 416-7.

At HILL END

The much abused Path. Course ended on September 17th and, happy once more, we went that evening to a dance organised by the Hill End Staff in aid of NALGO. This was a very gay affair. We even saw those stern gentlemen from the Head Male Nurse's Office with face-wide smiles. Games were a prominent feature of the fun and we tried them all in high hopes, soon dashed, of a prize. The anagram on the ticket we did not attempt, having put away the appropriate areas of cortex with our text books. In fact, so decerebrated were we that at the crucial hour of eleven we remarked brightly to our partner, "Look at that silly ass dancing with his hat on." Despite these failures we enjoyed ourselves thoroughly and congratulate the organisers. An impromptu choir rounded off the evening with a very active rendering of "The Swiss (for the duration) Band."

Returning from our brief holiday we noticed that many of our usually sprightly friends were somewhat stiff jointed. We did not question them but found the answer for ourselves the following Wednesday. High pitched whoops and the thunder of hooves from the Hall all added up to—Scottish Dancing! These weekly Caledonian frenzies, in which are included a number of Country Dances and Ballroom novelties, are a weakness of ours and we were soon leaping and yelling with the best. However, our dash of Highland blood prompts us to point out to certain Sassenachs that the essence of the Schottische is not to send flying as many other couples as possible.

Dancing and yet more dancing! What a gay round life here is. By the time these words are in print the Monday night gramophone dances will be gramophone no longer, for a band is being formed. A poster announces them as The Moron Trio, to consist of Nine-fingered Noel, Jelly-jointed John and Barrelhouse Bob. Reckon we all will have to get a hep judy to strut along down and bit that timber for some out of this world jive!

There is at the end of one of Hill End's many long corridors a mysterious door. From this gloomy portal steps lead down into, for all we knew until recently, a chamber of horrors. The other day, however, we saw an old friend emerging and asked him what went on inside. For answer he pointed to the legend

above the door—" Physiotherapy." This had always had for us something of the ring of, " Abandon hope all ye who enter here " (recently inscribed in chalk over the A.R. door) and so we asked timorously what it meant. We were answered with an enthusiastic jumble of words about massage and short wave diathermy and soon converted. That others may be stimulated to investigate this important department of the hospital in which they are studying, we are negotiating for an authoritative article on the work of the Rehabilitation Unit, so that it shall not remain, as it is for many of us, just another name on another sheet amongst a lot of paper from which we try to extract the necessary information to write up a yellow card.

For the rest, in brief—argument is now being had about a play or a show for Christmas. The Dramatic Society, being now in rather a sound groove, weighs heavily for a good play and it would certainly be preferred to the poor " show " of last year.

The grumble this term is that the firms are now too large. Most of us are quite happy in spite of that.

W. K. S.

At CAMBRIDGE

The long arm of the Surgeon having removed your normal correspondent for an indefinite period, we find ourselves required at short notice to skate lightly over the thin ice which constitutes news from Cambridge.

The month of August saw those of us unable to produce a convincing enough alibi encamped " somewhere in Cambridgeshire." We will not dwell long upon this painful episode; suffice it to say that for fourteen days a hundred or so medical students were thrown upon their own resources for social intercourse and entertainment (including song) and that much latent talent was discovered in their ranks. So militarised did they finally become that villagers were on occasion heard to exclaim, " Coo' look, soldiers! "

About eighty students, many of them still convalescent from these rigours, took advantage of the long vacation anatomy course held during September. This course, in spite of some slight misunderstanding between the more speedy directors and " the powers that be," lasted till the end of the month and full term began on October 5th.

By now the term is in full swing, all sporting activities functioning, so far, with great zeal, coffee houses well attended, and the Biochemistry department holding " back numbers " of terminal examinations at ten and sixpence a time.

A general meeting of the Students' Union in Cambridge is being held in the near future and it is to be hoped that we may soon have some definite news of the filling of a very large gap in student life here; that is, of the provision of some form of club room where students of all years can associate. There is a very real need for such facilities, which are long overdue, having been held up by lack of suitable accommodation.

P. J. C. C. and D. K. T.

SPORTS NEWS

RUGBY SEASON 1943-4

The rugby club is still short of shirts. Will anyone who possesses one he doesn't use please send it to the Hon. Sec., R.U.F.C. Any remnant, however tattered it may appear, will be gratefully received and put to good use.

Recently I looked through some back numbers of the JOURNAL and was interested to find that for years sports editors, honorary secretaries and correspondents have all been bewailing the apathy and unathletic frame of mind of the mass of students. Indeed in 1935 this sentiment was to be found in an article which was honoured by promotion from backpage sports gossip to an elevated seat near the editorial.

This year there seems every chance of some improvement, with a little luck and a few more players the rugby club may run 3 teams. At the present moment there are a bare 45 enthusiasts, another 10 would convert the " B " XV from a secretarial dream (? nightmare) into fact.

It is perhaps not out of place to mention that after a lapse of three seasons the soccer club has leapt back to life.

All contributors of sports news will henceforth be requested to wear rose-coloured spectacles and to follow Dr. Goebbel's journalistic form. Our victories will be triumphs of superhuman power

and masterly strategy. Any losses we may suffer will be superbly executed withdrawals to shorten our elastic defences. Perhaps by this subtle device we shall stir the stagnant student to interest if not activity; succeeding where our predecessors have failed with invective and ridicule.

This season the XV will be captained by C. S. M. Stephen. If the other 14 can play up to his standard it will be a splendid side.

The outsides are intact from last year, indeed now that Pitman is fit again and with the advent of a fast mover in Dale there should be the makings of a good threequarter line. Stephen and Hawkes now in their third season together should have an admirable understanding at halfback. Four members of the pack remain, and there appear to be several worthy candidates for the other places.

The "A" XV also has a nucleus of old players. A full list of strong fixtures has been arranged for them.

The first XV fixtures are:—

Oct.	2—K.C.H.	*	Jan.	8—London Hos.	*
	9—Guys	*		15—Wasps	*
	16—St. Th. Hos.	*		22—St. Mary's	A
	23—Middle. H.	A		29—O.C.T.U.	A
	30—St. Mary's	*	Feb.	5—Oxford	A
Nov.	6—Cambridge	A		12—Old Blues	*
	13—R.N.A.S.	*		19—Bedford	A
	20—Rosslyn Pk.	A		26—R.N.E. Col.	*
	27—Coventry	A	Mar.	4—P.S. Wand.	*
Dec.	4—1st Airborne Div.	*		11—Nuneaton	A
				18—Midd. Hos.	*
	11—Welsh Gds.	*		25—Coventry	*
	18—H.M.S. St. Vincent	*	April	1—R.A.A.F.	*
				8—Nuneaton	*
				15—Hospital 7s.	
				22—Middlesex 7s.	

* = Home games.

St. Bart.'s v. Kings College Hospital. Home. October 2nd, 1943. *Lost* 6—15.

This game was a good example of counting one's chickens rather too soon. Nobody expected K.C.H. to be as good as they were—man for man behind the scrum they were far faster and apparently fitter. Our pack heeled the ball with commendable regularity, and just as regularly the outsides failed to do anything with it—due mainly to (1) not watching the ball; (2) lying flat.

The opposing threequarters appreciated early on that our attacks were very delicate, and since they weren't getting the ball from the scrum decided to take it from one threequarter. This they did very effectively, their activities being carried out with great zest and some skill. These factors combined with speed were too much for us; 5 tries were piled up against our scattered defences.

Both our tries were scored in the first half. Davey followed a kick by Pitman to score far out. The second came from about the only movement the outsides carried out, and it was suitably rewarded when Dale scored. Hawkes was unfortunately wide with both kicks.

Team.—Gibson; Dale, Davey, Pitman, Jones; Hawkes, Stephen, Wood, Mathew, Richards, Anderson, Rogers, Corbett, Rimmington, Jones.

St. Bart.'s v. Guys. Home. October 9th, 1943. *Lost* 8—18.

A large crowd assembled at Chislehurst to see this game. Many of them be it noted were Guy's supporters. Perhaps when our centenary year comes along we may also have some travelling supporters.

The game started rather late, but even then we were without our captain, who, when he appeared, said the delay was due to pressure of work—during his absence Corbett acted as scrum half, and perhaps wishing to trick our opponents would put the ball in on the left shouting the while "Coming in right."

In the first five minutes we were awarded a penalty kick, which Hawkes converted with a good kick. Our re-arranged outsides had far more go than last week, and Pitman was getting past his opponent very well, from one of these cut throughs a clean movement started, and Davey ran well to score far out, Hawkes converting. Guys were getting most of the ball in the tight scrums and kept us on the defensive for most of the half. On two occasion Corbett saved what appeared to be certain tries—throughout the game he was the only forward who corner flagged.

In the second half we got more of the ball, especially in the line out where Anderson was prominent; though several moves started well they broke down, usually due to fumbled passes. Also the backs kicked too much, and what was worse they seemed to aim at Lewis, the Guy's back, who was in fine form, so that most of these kicks resulted in a dead loss. Midway through the half Guys rearranged their backs, a move which caught us having a pleasant sleep, the score rapidly became 8—8. While we were thinking about this their left wing came into the line to give them a man over, and they scored again—in fact they scored twice, making 8—18. This sudden collapse was due to (1) lack of training; (2) total absence of corner flagging forwards (Corbett excepted).

Team.—Gibson; Davey, Hunt, Hawkes, Jones; Pitman, Stephen; Wood, Mathew, Richards, Anderson, Rogers, Corbett, Rimmington, Jones.

SOCCER AT CAMBRIDGE

Once again white knees take the place of white flannels on the Queen's College ground, and once again nets appear behind the goal posts and round the cricket square as a protection for that sacred piece of ground.

On looking around we find ourselves in the favourable position of being able to run two teams with a few reserves to spare for those hard days when injuries and exams. beset us. Fortunately, we still have eight of last year's successful combination on which to build a new team; and at a meeting it was decided to retain the same club officers.

The season began with a five-four victory over a strong Queen Mary College team, while the second XI managed to hold the Queen's College first team to a draw.

Against Q.M.C. it was not long before K. A. McCluskey scored his first two goals of the season despite counter-attractions standing on the touchline. H. J. Burns, now playing as an inside forward, also broke his duck, while B. Thomas, at centre forward in place of P. M. Goodrich, who is unable to play this term, snapped in two quick goals during the later stages of the game.

Our captain, M. K. Morgan, gallantly shouldered the responsibility of a centre half, from whence, with R. Xavier and C. Whitehead-Evans, he can conduct his plans of defence.

P. M. G.

HOCKEY

v. Westminster. Ocober 2nd, 1943. Won 1—0.

The hospital hockey team opened the season with a match against Westminster. In spite of going to the wrong Tube station Bart.'s arrived before their opponents, an almost unprecedented occurrence. The standard of hockey was not what it might have been, but it was the first game of the season and the pitch was a trifle rough. The usual little men, who make the ball jump over the average man's stick when he is trying to stop it, were much in evidence.

Bart.'s started strongly, but play was fairly even. The opposing centre forward took advantage of the activities of the local gremlins to put on some dangerous attacks. Then Green on the left wing discarded his boots, and Bart.'s returned to the attack with a new strength but could not score.

At half-time both teams were refreshed with lemonade as a war-time substitute for lemons. Early in the second half Harrison scored for Bart.'s, and shortly afterwards we suffered a major disaster when he had to leave to give an anæsthetic. Despite Harrison's absence Bart.'s managed to hold on to their lead and even do a moderate amount of attacking, leaving the result 1—0 in our favour.

After tea our social side, potentially so strong, but weakened by the absence of Harrison, began to dwindle alarmingly. This was due both to the local lack of facilities and to the approaching Conjoint Exams. Our opponents seemed in no mood to remain, and everyone melted away, leaving only five Bart.'s men to continue the evening in the local.

v. St. Thomas's. Saturday, October 9th. Drawn 2 all.

For this match we were fortunate in having the services of Surg.-Lieut. A. J. Danby and Lieut. R. B. McGrigor, who were both on leave, and a strong team assembled (eventually) at Chislehurst. However, fate, in the shape of London Transport, stepped in, and led to one member arriving too late to take any part in the game, and for the first half we had only ten men. This, no doubt, was partly responsible for the fact that Thomas's took control right at the beginning. Our defence did not seem to settle down well, and the forwards got few chances. The Thomas's forwards were very dangerous, particularly the outside left, but they saved us several times by getting offside at the critical moment. In spite of this and much hard work by Ellis in goal, we were two goals down at half-time.

At half-time one of the umpires, of which we provided two (is this a record?) was drafted into the team to make up the eleven. In the second half our defence proceeded to find its feet (figuratively speaking), and the forwards did quite a lot of attacking. After about 15 minutes McIlroy got the ball in our half, by-passed several defenders, and, discovering that he still had the ball, celebrated by banging it quite decisively into the corner of the Thoma's goal. Five minutes later, during a melée in the circle, McIlroy scored again. Thomas's tried hard to retrieve their position, but our defence performed one miracle after another with supreme sangfroid, and there was no further score by either side.

An extremely enjoyable afternoon was rounded off by an equally pleasant social evening.

v. Guys. Saturday, October 16th. Won 4—3.

The thoughtlessness of the authorities in leaving their pavements projecting four inches above road level on Saturday evenings, the incidence of a post-examinational migration, and other factors, reduced our team, if not to a shadow, at least to a rather cachetic version of its former self. The gremlins, too, were out again in full force, and even the backbones of the side seemed to have difficulty in getting their sticks and the ball in the same place at the same time. Of the first half the less said the better. Guys began by attacking, and before very long scored. Play went up and down the field in a series of roll-ins, but we never looked dangerous except when on one occasion Harrison took the ball right through the opposing defence, only to flick it just outside the goal. However, another solo effort, this time by Andrew, did lead to a goal. We forced several corners, but did nothing with them, and Guys scored twice more, making the half-time score 3—1.

In the second half we began to get the ball rather more under control, and following a corner Andrew scored again. Inspired by this, our defence went to almost unprecedented lengths to disrupt the opposing attack, and shortly afterwards Giles sent the ball, accompanied by a somewhat generous helping of turf, into the Guys' goal. We were now, if not playing much better hockey, at least showing signs of throwing off the mass paresis which had overwhelmed us at the beginning. Before long the highlight of the afternoon was reached—a terrific goal high and in the corner from a narrow angle, scored by Andrew. A number of anxious moments followed, but we held our lead until the end.

EXAMINATION RESULTS

CONJOINT BOARD

ANATOMY

Dixon, J. E. R.
Gourlay, N. G. O.
Storey, B. H.

PHYSIOLOGY

Dixon, J. E. R.
Daniel, W. R.
Dibb, F. R. F.
Cheshire, D. J. E.
Mehta, M. D.
Gourlay, N. G. O.

PHARMACOLOGY

Thorne, N. A.
McGregor, R. C.
Pracy, J. P.
Marrett, J. E.
Roberts, D. C.
Samrah, M. E.
Laymond, A. O.
Mark, P. M. C.
Monks, P. J. W.
Thomson, S. W.
Mehta, J. D.
Milbourne, A. G.
Hunt, M. F.
Sahakian, J. G.

SOCIETY OF APOTHECARIES OF LONDON

The dates of the Society's Examinations for the month of December:

Surgery—6th, 8th, 9th.
Medicine, Pathology—13th, 15th, 16th.
Midwifery—14th, 15th, 16th, 17th.